

General

Title

Measles, mumps, and rubella (MMR) vaccine: percentage of pediatric patients with HIV infection who have had at least one dose of MMR vaccine administered between 12 to 24 months of age.

Source(s)

Health Resources and Services Administration (HRSA). HAB HIV performance measures: pediatrics. Rockville (MD): Health Resources and Services Administration (HRSA); 2010 Aug 19. 30 p.

Measure Domain

Primary Measure Domain

Clinical Quality Measures: Process

Secondary Measure Domain

Does not apply to this measure

Brief Abstract

Description

This measure is used to assess the percentage of pediatric patients with human immunodeficiency virus (HIV) infection who have had at least one dose of measles, mumps, and rubella (MMR) vaccine administered between 12 to 24 months of age.

Rationale

Human immunodeficiency virus (HIV)-related morbidity and mortality has dropped dramatically due to advances in HIV/acquired immune deficiency syndrome (AIDS) treatment. But reductions are uneven across HIV-infected populations due to unequal access to care and variable quality of services provided. Quality management seeks to enhance the quality of HIV care provided and increase access to services. They do so by measuring how health and social services meet established professional standards and user expectations.

Vaccines are an effective primary prevention tool and HIV-infected children should be protected from

vaccine-preventable diseases. Children with HIV infection are at higher risk than immunocompetent children for complications of varicella, herpes zoster and measles. Measles, mumps, and rubella (MMR) is recommended for all asymptomatic and symptomatic HIV-infected children who are not severely immunocompromised and who lack evidence of measles immunity (Mofenson et al. 2009).

The National Immunization Survey notes that while many of the individual vaccine rates meet or exceed the goals set by Healthy People 2010, children living below poverty had lower coverage than children living at or above poverty for most vaccines. Sustaining high coverage levels and using effective methods of reducing disparities across states/local areas and income groups remains a priority to fully protect children and limit the incidence of vaccine-preventable diseases (Centers for Disease Control and Prevention [CDC], 2009).

The measure reflects important aspects of care that significantly impacts mortality.

U.S. Public Health Guidelines

MMR vaccine is recommended for all asymptomatic HIV-infected persons who are not severely immunosuppressed and who lack evidence of measles immunity. MMR vaccination of symptomatic HIV infected persons should be considered if they: a) do not have evidence of severe immunosuppression (CD4 less than 15%) and; b) lack evidence of measles immunity (Mofenson et al., 2009).

Evidence for Rationale

Centers for Disease Control and Prevention (CDC). National, state, and local area vaccination coverage among children aged 19-35 months - United States, 2008. MMWR Morb Mortal Wkly Rep. 2009 Aug 28;58(33):921-6. [PubMed](#)

Health Resources and Services Administration (HRSA). Deliver HIV/AIDS care: quality of care. [internet]. Rockville (MD): Health Resources and Services Administration (HRSA); [accessed 2016 Jun 23].

Health Resources and Services Administration (HRSA). HAB HIV performance measures: pediatrics. Rockville (MD): Health Resources and Services Administration (HRSA); 2010 Aug 19. 30 p.

Mofenson LM, Brady MT, Danner SP, Dominguez KL, Hazra R, Handelsman E, Havens P, Nesheim S, Read JS, Serchuck L, Van Dyke R, Centers for Disease Control and Prevention, National Institutes of Health, HIV Medicine Association of the Infectious Diseases Society of America, Pediatric Infectious Diseases Society, American Academy of Pediatrics. Guidelines for the prevention and treatment of opportunistic infections among HIV-exposed and HIV-infected children: recommendations from CDC, the National Institutes of Health, the HIV Medicine Association [trunc]. MMWR Recomm Rep. 2009 Sep 4;58(RR-11):1-166.

Primary Health Components

Human immunodeficiency virus (HIV); measles, mumps, and rubella (MMR) vaccine; children

Denominator Description

Number of human immunodeficiency virus (HIV)-infected pediatric patients greater than equal to 2 years and less than 3 years of age who had a medical visit with a provider with prescribing privileges at least once in the measurement year (see the related "Denominator Inclusions/Exclusions" field)

Numerator Description

Number of human immunodeficiency virus (HIV)-infected pediatric patients who had at least one dose of measles, mumps, and rubella (MMR) administered between 12 to 24 months of age (see the related "Numerator Inclusions/Exclusions" field)

Evidence Supporting the Measure

Type of Evidence Supporting the Criterion of Quality for the Measure

A clinical practice guideline or other peer-reviewed synthesis of the clinical research evidence

Additional Information Supporting Need for the Measure

Unspecified

Extent of Measure Testing

Unspecified

State of Use of the Measure

State of Use

Current routine use

Current Use

not defined yet

Application of the Measure in its Current Use

Measurement Setting

Ambulatory/Office-based Care

Professionals Involved in Delivery of Health Services

not defined yet

Least Aggregated Level of Services Delivery Addressed

Individual Clinicians or Public Health Professionals

Statement of Acceptable Minimum Sample Size

Unspecified

Target Population Age

Age less than 13 years

Target Population Gender

Either male or female

National Strategy for Quality Improvement in Health Care

National Quality Strategy Aim

Better Care

National Quality Strategy Priority

Health and Well-being of Communities

Prevention and Treatment of Leading Causes of Mortality

Institute of Medicine (IOM) National Health Care Quality Report Categories

IOM Care Need

Living with Illness

Staying Healthy

IOM Domain

Effectiveness

Data Collection for the Measure

Case Finding Period

The measurement year

Denominator Sampling Frame

Patients associated with provider

Denominator (Index) Event or Characteristic

Clinical Condition

Encounter

Patient/Individual (Consumer) Characteristic

Denominator Time Window

not defined yet

Denominator Inclusions/Exclusions

Inclusions

Number of human immunodeficiency virus (HIV)-infected pediatric patients greater than or equal to 2 years and less than 3 years of age who had a medical visit with a provider with prescribing privileges at least once in the measurement year

Note:

A "provider with prescribing privileges" is a health care professional who is certified in his/her jurisdiction to prescribe medications. Refer to the original measure documentation for additional data elements.

Exclusions

Pediatric patients with CD4 less than 15% between 12 to 24 months of age

Pediatric patients newly enrolled after 2 years of age

Exclusions/Exceptions

not defined yet

Numerator Inclusions/Exclusions

Inclusions

Number of human immunodeficiency virus (HIV)-infected pediatric patients who had at least one dose of measles, mumps, and rubella (MMR) administered* between 12 to 24 months of age

*Documentation of vaccination can include any of the following: 1) immunization record from another provider; 2) personal record of immunization; or 3) serologic evidence of antibody titers. If serology is used, titers must have been drawn before 2 years of age.

Exclusions

Unspecified

Numerator Search Strategy

Fixed time period or point in time

Data Source

Administrative clinical data

Electronic health/medical record

Paper medical record

Registry data

Type of Health State

Does not apply to this measure

Instruments Used and/or Associated with the Measure

Unspecified

Computation of the Measure

Measure Specifies Disaggregation

Does not apply to this measure

Scoring

Rate/Proportion

Interpretation of Score

Desired value is a higher score

Allowance for Patient or Population Factors

not defined yet

Standard of Comparison

not defined yet

Prescriptive Standard

Healthy People 2010 goal: 90% for individual vaccines

National Immunization Survey (NIS)

2004: 93.0%
2005: 91.5%
2006: 92.3%
2007: 92.3%
2008: 92.1%

Note: The NIS estimates vaccination coverage among children 19 to 35 months and is not specific to human immunodeficiency virus (HIV) disease.

Evidence for Prescriptive Standard

Centers for Disease Control and Prevention (CDC), Office of Disease Prevention and Health Promotion (ODPHP), Office of Disease Prevention and Health Promotion (ODPHP). Healthy people 2010. [internet]. Washington (DC): U.S. Department of Health and Human Services (HHS); [accessed 2010 Feb 10].

Centers for Disease Control and Prevention (CDC). National, state, and local area vaccination coverage among children aged 19-35 months - United States, 2008. MMWR Morb Mortal Wkly Rep. 2009 Aug 28;58(33):921-6. [PubMed](#)

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Identifying Information

Original Title

MMR vaccination.

Measure Collection Name

HIV/AIDS Bureau (HAB) Performance Measures

Measure Set Name

Pediatrics

Submitter

Health Resources and Services Administration - Federal Government Agency [U.S.]

Developer

Health Resources and Services Administration - Federal Government Agency [U.S.]

Funding Source(s)

Unspecified

Composition of the Group that Developed the Measure

Unspecified

Financial Disclosures/Other Potential Conflicts of Interest

Unspecified

Adaptation

This measure was not adapted from another source.

Date of Most Current Version in NQMC

2010 Aug

Measure Maintenance

Unspecified

Date of Next Anticipated Revision

Unspecified

Measure Status

This is the current release of the measure.

Measure Availability

Source available from the [Health Resources and Services Administration \(HRSA\) Web site](#)

For more information, contact the HRSA HIV/AIDS Bureau (HAB) at 5600 Fishers Lane, Rockville, MD 20857; E-mail: HIVmeasures@hrsa.gov; Web site: www.hrsa.gov/index.html .

NQMC Status

This NQMC summary was completed by ECRI Institute on July 8, 2016.

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Production

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